

**REMARKS**

The Examiner states in the Advisory Action of December 21, 2006 that Applicant's claim amendments filed on December 5, 2006 in response to the Final Office Action mailed on September 27, 2006 raised new issues and would not be entered.

Additionally, the Examiner stated on the PTOL-303 Continuation Sheet that he "could not find within the specification a 'plurality of (implied separate) neural networks.'" The Examiner then stated that "the description in [paragraph] 0033 states that the 'model unit 20 includes one or more estimating modules[,] is not equivalent to 'includes plural second recurrent neural networks.' The differences that the specification allows for a single second neural network and the amended claims exclude a single second neural network."

Contrary to the Examiner's assertion that Applicant's Specification allows for only a single second neural network, Applicant provides the relevant portions in the Specification that demonstrate specification support for *a first recurrent neural network* and *plural second recurrent neural networks*.

The following passage in Applicant's Specification demonstrate the vehicle motion model unit 20 including estimating modules 21 to 24 wherein each estimating module includes a recurrent neural network.

The vehicle motion model unit 20 includes one or more estimating modules (in the present embodiment, the estimating modules 21 to 24), where each of the estimating modules 21 to 24 functions as a vehicle motion model representing a distinct motion state. Each of the estimating modules 21 to 24 includes a recurrent neural network (hereinafter merely referred to as "RNN"), and outputs a parameter indicating the motion state of a vehicle (hereinafter referred to as "vehicle parameters") based on predetermined input information. In the present embodiment, four vehicle parameters are output from the vehicle motion model unit 20. Specifically, the estimating module 21 outputs an estimation value of the yaw rate as a vehicle parameter, and the estimating module 22 outputs an estimation value of the lateral acceleration (hereinafter merely referred to as "lateral G") as a vehicle parameter. Furthermore, the

estimating module 23 outputs an estimation value of roll as a vehicle parameter, and the estimating module 24 outputs an estimation value of pitch as a vehicle parameter. (Emphasis added.) (Page 11, line 16 to page 12, line 18.)

Applicant's Specification describes that estimating module 21 (*a first recurrent neural network*) outputs a state variable P from the node N18 which is input in parallel to the RNN estimating modules 22 to 24 (*plural second recurrent neural networks*).

The output layer is equipped with one node Nn (the node N16) for outputting a vehicle parameter. However, in the present embodiment, a feedback loop from the output layer to the input layer exists as described later. Additionally, the node N17 aiming only at the feedback is further set to carry out the feedback to the input layer in a multiplexing style. Furthermore, in Fig. 2, the node N18 for outputting a state variable P is set separately from the vehicle parameter in the RNN constituting the estimating module 21 for the yaw rate. The state variable P output from the node N18 is input to the input layer node Nn of the RNN constituting the estimating modules 22 to 24 for the lateral G, the roll and the pitch. (Emphasis added.) (Page 13, lines 3-14.)

Thus, Applicant demonstrates support from the Specification for *a first recurrent neural network* and *plural second recurrent neural networks* as reflected in the most current amendment to the claims filed on December 5, 2006 and entered by a Request for Continued Examination (RCE) filed on December 27, 2006.

**FORMAL MATTERS AND CONCLUSION**

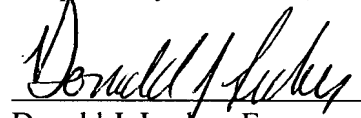
In view of the foregoing, Applicant submits that claims 1-4 and 11-16, all of the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

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Respectfully Submitted,



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